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RV32-VEGA-Lite

VEGA

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ICAP Classification: CP: IUO: X PUBI:

Designer: Antonio Quiroz	Drawing Title: RV32-VEGA-Lite	
Drawn by: Antonio Quiroz	Page Title: Table of Contents, Revisions	
Approved: Alistair M.	Size C	Document Number SCH-45731, PDF: SPF-45731 Rev B
	Date: Tuesday, April 23, 2019	Sheet 1 of 7

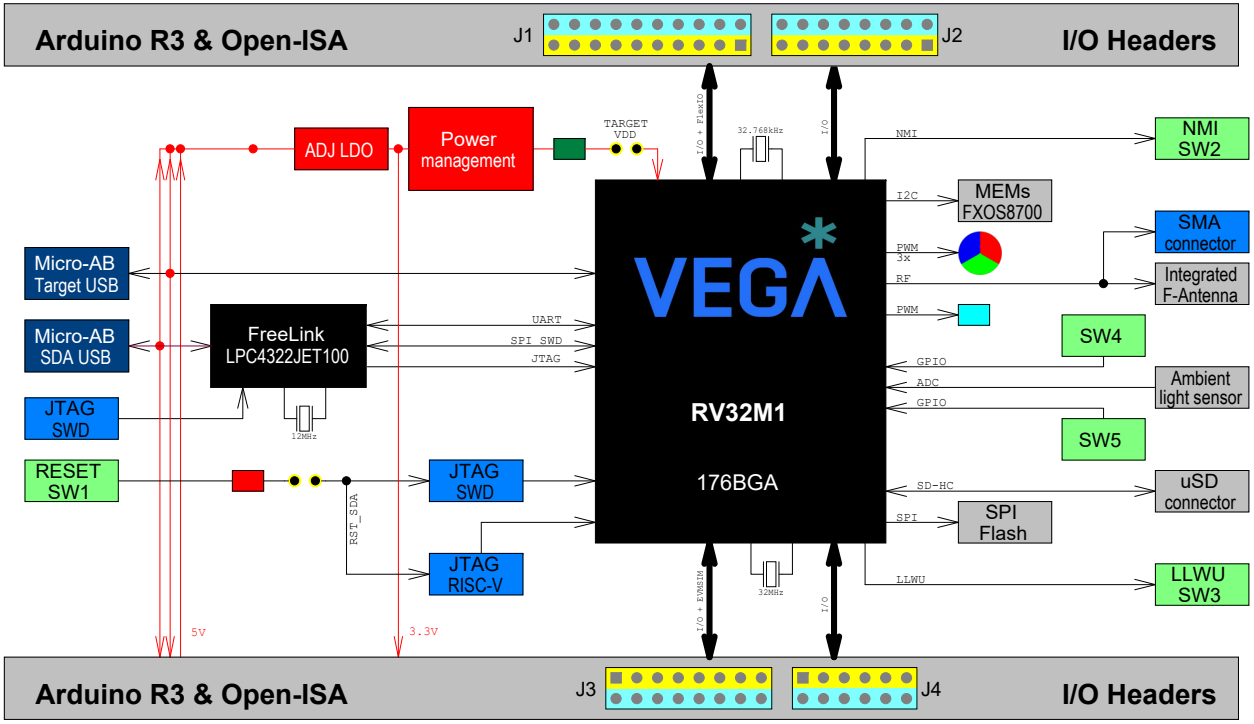
1. Unless Otherwise Specified:
   All resistors are in ohms, 5%
   All voltages are DC
   All polarized capacitors are aluminum electrolytic

2. Interrupted lines coded with the same letter or letter combinations are electrically connected.

3. Device type number is for reference only. The number varies with the manufacturer.

4. Special signal usage:
   _B Denotes - Active-Low Signal
   <> or [] Denotes - Vectored Signals
   Green text Denotes - Extra Notes to be considered.

5. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.



VEGA

ICAP Classification: CP: ___ IUO: PUBI: _X_

Drawing Title: **RV32-VEGA-Lite**

Page Title: **BLOCK DIAGRAM**

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U7A
RV32M1

	PTA0	BUTTON1_NMI	PTA0	B10	PTA0/NMI
		RV32_SWD_CLK	PTA1	E12	PTA1/LLWU_P0/JTAG_TCLK/SWD_CLK/RF_ANT_B/LPUART0_CTS/LPI2C0_SDAS/LPUART1_CTS
SWD	JTAG_TDI_TGTMCU		PTA2	F11	PTA2/LLWU_P1/JTAG_TDI/RF_ANT_A/LPUART0_RX/LPI2C0_SDA/LPUART1_RX
	SWD_SWO_TGTMCU	SWD_SWO_TGTMCU	PTA3	D11	PTA3/LPUART0_TX/RF0_TX_SWITCH/LPI2C0_SCL/LPUART1_TX/TPM0_CLKIN/JTAG_TDO/SWD_SWO
	SWD_DIO_TGTMCU	SWD_DIO_TGTMCU	PTA4	B9	PTA4/JTAG_TMS/SWD_DIO/RF0_RX_SWITCH/LPUART0_RTS/LPI2C0_SCLS/LPUART1_RTS/LPCMP0_OUT
					PTA9/RV_JTAG_TCLK/LPI2C2_SDAS/LPSPI3_SCK/FB_A23
		RV_JTAG_TCLK		E10	PTA10/RV_JTAG_TDI/LPI2C2_SCLS/LPSPI3_SOUT/FB_A22
		RV_JTAG_TDI		A9	PTA14/RV_JTAG_TDO/LPI2C2_SDA/FB_AD23/LPCMP0_OUT
		RV_JTAG_TDO		E8	PTA15/RV_JTAG_TMS/LPI2C2_SCL/FB_AD22
		RV_JTAG_TMS		A8	PTA17/LPI2C2_HREQ/LPSPI3_PCS1/EMVSIM0_CLK/FB_AD21
	PTA17	ARDUINO_EMVSIM_CLK	PTA17	F7	PTA18/LPSPI2_PCS1/LPSPI3_PCS3/EMVSIM0_RST/FB_AD20
	PTA18	ARDUINO_EMVSIM_RST	PTA18	D8	PTA19/LPSPI2_PCS3/LPSPI3_SCK/EMVSIM0_VCCEN/FB_AD19/TPM2_CH5
EMVSIM	PTA19	ARDUINO_EMVSIM_VCCEN	PTA19	D7	PTA20/LPSPI2_SCK/LPSPI1_PCS1/EMVSIM0_IO/FB_AD18/TPM2_CH4
	PTA20	ARDUINO_EMVSIM_IO	PTA20	C7	PTA21/LPSPI2_SOUT/EMVSIM0_PD/FB_AD17/TPM2_CH3
	PTA21	ARDUINO_EMVSIM_PD	PTA21	B7	PTA22/LLWU_P2/LPSPI2_PCS2/LPI2C2_HREQ/FB_AD16/TPM2_CH2
RGB	PTA22	RGB_LED_BLUE	PTA22	B6	PTA23/LPSPI2_SIN/LPSPI1_PCS3/LPI2C2_SDA/FB_AD15/TPM2_CH1
	PTA23	RGB_LED_GREEN	PTA23	E6	PTA24/LPSPI2_PCS0/LPSPI1_SCK/LPI2C2_SCL/FB_OE/TPM2_CH0
	PTA24	RGB_LED_RED	PTA24	D6	PTA25/LPUART1_RX/LPSPI3_SOUT/LPI2C2_SDAS/FB_AD31
UART1	PTA25	ARDUINO_D0_UART1_RX	PTA25	B5	PTA26/LPUART1_TX/LPSPI3_PCS2/LPI2C2_SCLS/FB_AD30
	PTA26	ARDUINO_D1_UART1_TX	PTA26	A5	PTA27/LPUART1_CTS/LPSPI3_SIN/FB_AD29
	PTA27	ARDUINO_D2	PTA27	A3	PTA28/LPUART1_RTS/LPSPI3_PCS0/FB_AD28
				A2	PTA30_1/LLWU_P3/LPUART2_CTS/LPSPI1_SOUT/FB_AD14/TPM1_CH0/LPTMR2_ALT2
		ARDUINO_D5	PTA30	A1	PTA30_2/LLWU_P3/LPUART2_CTS/LPSPI1_SOUT/FB_AD14/TPM1_CH0/LPTMR2_ALT2
DIGITAL	PTA30	ARDUINO_D6	PTA31	B2	PTA31/LPUART2_RTS/LPSPI1_PCS2/FB_AD13/TPM1_CH1
	PTA31			C4	
				B3	PTB0/LPUART2_TX/LPSPI1_SIN/USB0_SOF_OUT/CLKOUT/TPM1_CLKIN
		ARDUINO_D7	PTB1	C3	PTB1/LLWU_P4/LPUART2_RX/LPSPI1_PCS0/I2S0_TXD1/FB_AD12/LPTMR1_ALT3
	PTB1	ARDUINO_D8	PTB2	B1	PTB2/LLWU_P5/RF0_RF-OSC_EN/LPSPI0_PCS1/LPUART1_RXD/I2S0_TXD0/FB_AD11/TPM0_CH0
	PTB2	ARDUINO_D9	PTB3	C1	PTB3/LPADC0_SE0/RF0_EXT_OSC_EN/LPSPI0_PCS3/LPUART1_TX/I2S0_TX_FS/FB_AD10/TPM0_CH1
	PTB3	ARDUINO_D13/SPI0_SCK	PTB4	C2	PTB4/LLWU_P6/LPADC0_SE1/RF0_RF_OFF/RF0_DFT_RESET/LPSPI0_SCK/LPUART1_CTS/I2S0_TX_BCLK/FB_AD9/TPM0_CH2
SPI0	PTB4	ARDUINO_D11/SPI0_SOUT	PTB5	D2	PTB5/RF0_ACTIVE/LPSPI0_SOUT/LPUART1_RTS/I2S0_MCLK/FB_AD8/TPM0_CH3
	PTB5	ARDUINO_D10/SPI0_PCS2	PTB6	E1	PTB6/LLWU_P7/LPSPI0_PCS2/LPI2C1_SDA/I2S0_RX_BCLK/FB_AD7/TPM0_CH4/RF0_BSM_FRAME
	PTB6	ARDUINO_D12/SPI0_SIN	PTB7	E2	PTB7/LLWU_P8/LPADC0_SE2/LPSPI0_SIN/LPI2C1_SDAS/I2S0_RX_FS/FB_AD6/TPM0_CH5/RF0_BSM_DATA
	PTB7			F5	PTB8/LLWU_P9/RF0_EARLY_WARNING/LPSPI0_PCS0/LPI2C1_SCLS/I2S0_RXD0/FB_AD5/LPTMR0_ALT1
ADC/LIGHT SENSOR	PTB9	ARDUINO_A2	PTB8	F4	PTB9/SPM_LPREQ/LPADC0_SE3/LPSPI0_PCS1/LPI2C1_SCL/I2S0_RXD1/FB_RW/FXIO0_D0
				G6	PTB11/LPUART2_RX/LPI2C1_SDAS/LPI2C0_SDA/FB_AD27/FXIO0_D1
				G4	PTB12/LPUART2_TX/LPI2C1_SCLS/LPI2C0_SCL/FB_AD26/TPM3_CLKIN/FXIO0_D2
		ARDUINO_D3	PTB13	G3	PTB13/LPUART2_CTS/LPI2C1_SDA/LPI2C0_SDAS/FB_AD25/TPM3_CH0/FXIO0_D3
	PTB13	ARDUINO_D4	PTB14	G2	PTB14/LPUART2_RTS/LPI2C1_SCL/LPI2C0_SCLS/FB_AD24/TPM3_CH1/FXIO0_D4
	PTB14	J3 ARDUINO HEADER/FLEXIO_D5	PTB15	G1	PTB15/LPI2C1_HREQ/LPTMR2_SCL/FB_CS5/FB_TSIZ1/FB_BE23_16/TPM0_CLKIN/FXIO0_D5
	PTB15	J3 ARDUINO HEADER/FLEXIO_D6	PTB16	H5	PTB16/LLWU_P10/LPUART3_CTS/LPI2C3_SDA/FB_CS4/FB_TSIZ0/FB_BE31_24/FXIO0_D6
	PTB16	J3 ARDUINO HEADER/FLEXIO_D7	PTB17	K5	PTB17/LPUART3_RTS/LPI2C3_SCLS/FB_TBST/FB_CS2/FB_BE15_8/FXIO0_D7
	PTB17			H2	PTB18/LPSPI1_PCS1/LPUART2_RX/LPI2C3_SDAS/FB_CS3/FB_BE7_0/FB_TA/FXIO0_D8
				K4	PTB19/LPSPI1_PCS3/LPUART2_TX/FB_ALE/FB_CS1/FB_TS/TPM1_CLKIN/FXIO0_D9
		MEMORY/SPI2_SCK	PTB20	J1	PTB20/LLWU_P11/LPSPI1_SCK/LPUART2_CTS/FB_CS0/TPM1_CH0/FXIO0_D10
	PTB20	MEMORY/SPI2_SOUT	PTB21	J2	PTB21/LPSPI1_SOUT/LPUART2_RTS/LPI2C2_HREQ/FB_AD4/TPM1_CH1/FXIO0_D11
SPI1 EXT MEMORY	PTB21	MEMORY/SPI2_PCS0	PTB22	L1	PTB22/LLWU_P12/LPSPI1_PCS2/LPUART0_CTS/LPI2C2_SDA/FB_AD3/TPM2_CLKIN/FXIO0_D12
	PTB22	MEMORY/SPI2_SIN	PTB24	L2	PTB24/LPSPI1_SIN/LPUART0_RTS/LPI2C2_SCL/FB_AD2/EWM_IN/FXIO0_D13
	PTB24			L6	PTB25/LLWU_P13/LPSPI1_PCS0/LPUART0_RX/LPI2C2_SDAS/FB_AD1/EWM_OUT/FXIO0_D14
				L4	PTB26/USB0_SOF_OUT/LPUART0_TX/LPI2C2_SCLS/FB_AD0/LPCMP0_OUT/RF0_BSM_CLK
				M4	PTB28/LLWU_P14/LPUART3_RX/I2S0_TXD0/FB_A16/FXIO0_D15
FLEXIO	PTB29	TO ARDUINO HEADER/FLEXIO_D16	PTB29	L3	PTB29/LPUART3_TX/I2S0_TX_FS/FB_A17/FXIO0_D16
				M5	PTB30/I2S0_TX_BCLK/FB_A18
				M7	PTB31/I2S0_RXD0/FB_A19
				N1	
				M2	PTC0/I2S0_RX_FS/FB_A20
				N2	PTC1/I2S0_RX_BCLK/FB_A21
UART0 DEBUG	PTC7	DEBUG UART0_RX	PTC7	P3	PTC7/LLWU_P15/LPCMP0_IN0/LPSPI0_PCS3/LPUART0_RX/LPI2C1_HREQ/TPM0_CH0/LPTMR1_ALT1
	PTC8	DEBUG UART0_TX	PTC8	R1	PTC8/LPCMP0_IN1/LPSPI0_SCK/LPUART0_TX/LPI2C0_HREQ/TPM0_CH1
I2C0	PTC9	ARDUINO_D14/I2C0_SDA	PTC9	R2	PTC9/LLWU_P16/LPADC0_SE4/LPCMP0_IN2/LPSPI0_SOUT/LPUART0_CTS/LPI2C0_SDA/TPM0_CH2/LPTMR0_ALT2
	PTC10	ARDUINO_D15/I2C0_SCL	PTC10	T1	PTC10/LPADC0_SE5/LPSPI0_PCS2/LPUART0_RTS/LPI2C0_SCL/TPM0_CH3
ADC	PTC11	ARDUINO_A0/ADC0_SE6	PTC11	R3	PTC11/LLWU_P17/LPADC0_SE6/LPSPI0_SIN/LPI2C1_SDA/LPI2C0_SDAS/TPM0_CH4/EWM_IN
	PTC12	ARDUINO_A1/ADC0_SE7	PTC12	P6	PTC12/LLWU_P18/LPADC0_SE7/LPSPI0_PCS0/LPI2C1_SCL/LPI2C0_SCLS/TPM0_CH5/EWM_OUT
	PTC27	SD_DETECT	PTC27	U5	PTC27/TPM0_CH4
	PTC28	TO ARDUINO HEADER/FLEXIO_D17	PTC28	N6	PTC28/LPSPI0_PCS1/TPM0_CH3/FXIO0_D17
	PTC29	TO ARDUINO HEADER/FLEXIO_D18	PTC29	R7	PTC29/LPUART1_RX/LPSPI0_PCS3/TPM0_CH2/FXIO0_D18
FLEXIO	PTC30	TO ARDUINO HEADER/FLEXIO_D19	PTC30		PTC30/LPUART1_TX/LPSPI0_SCK/TPM0_CH1/FXIO0_D19

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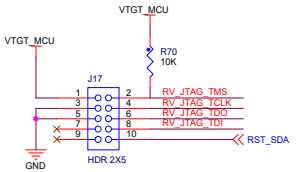
		TO ARDUINO HEADER/FLEXIO_D20	PTD0	T7	PTD0/LPUART1_CTS/LPSPI0_SOUT/TPM0_CH0/FXIO0_D20
	PTD0	TO ARDUINO HEADER/FLEXIO_D21	PTD1	P7	PTD1/LPUART1_RTS/LPSPI0_PCS2/EWM_IN/FXIO0_D21
FLEXIO	PTD1	TO ARDUINO HEADER/FLEXIO_D22	PTD2	U7	PTD2/SDHC0_D7/LPSPI0_SIN/EWM_OUT/FXIO0_D22
	PTD2	TO ARDUINO HEADER/FLEXIO_D23	PTD3	T8	PTD3/SDHC0_D6/LPSPI0_PCS0/EMVSIM0_CLK/TPM2_CLKIN/FXIO0_D23
	PTD3	TO ARDUINO HEADER/FLEXIO_D24	PTD4	N8	PTD4/SDHC0_D5/LPSPI2_PCS1/EMVSIM0_RST/FXIO0_D24
	PTD4	TO ARDUINO HEADER/FLEXIO_D25	PTD5	N10	PTD5/LPADC0_SE8/SDHC0_D4/LPSPI2_PCS3/EMVSIM0_VCCEN/FXIO0_D25
	PTD5	SDHC0_D1	PTD6	U9	PTD6/LPADC0_SE9/SDHC0_D1/LPSPI2_SCK/EMVSIM0_IO/TRACE_D3/TPM2_CH5/FXIO0_D26
	PTD6	SDHC0_D0	PTD7	P10	PTD7/LPADC0_SE10/SDHC0_D0/LPSPI2_SOUT/EMVSIM0_PD/TRACE_D2/TPM2_CH4/FXIO0_D27
MICRO SDA CARD CONECTOR	PTD7	SDHC0_DCLK	PTD8	T9	PTD8/LLWU_P19/LPADC0_SE11/SDHC0_DCLK/LPSPI2_PCS2/LPI2C1_SDAS/TRACE_D1/TPM2_CH3/FXIO0_D28
	PTD8	SDHC0_CMD	PTD9	U11	PTD9/LPADC0_SE12/SDHC0_CMD/LPSPI2_SIN/LPI2C1_SCLS/TRACE_D0/TPM2_CH2/FXIO0_D29
	PTD9	SDHC0_D3	PTD10	P11	PTD10/LLWU_P20/LPADC0_SE13/SDHC0_D3/LPSPI2_PCS0/LPI2C1_SDA/TRACE_CLKOUT/TPM2_CH1/FXIO0_D30
	PTD10	SDHC0_D2	PTD11	R11	PTD11/LPADC0_SE14/SDHC0_D2/USB0_SOF_OUT/LPI2C1_SCL/CLKOUT/TPM2_CH0/FXIO0_D31
	PTD11				
	PTE0	RED_LED_STS	PTE0	R14	PTE0/LPCMP1_IN4/EWM_IN
	PTE1	FXOS8700_INT1	PTE1	R16	PTE1/LLWU_P21/LPADC0_SE18/SDHC0_D1/LPI2C0_SDAS/LPSPI3_PCS1/EWM_OUT/LPTMR1_ALT2
	PTE2	ARDUINO_A4/ADC0_SE19	PTE2	P12	PTE2/LPADC0_SE19/SDHC0_D0/LPI2C0_SCLS/LPSPI3_PCS3/LPCMP1_OUT
	PTE3	ARDUINO_A5/ADC0_SE20	PTE3	N12	PTE3/LLWU_P22/LPADC0_SE20/LPCMP1_IN0/SDHC0_D7/LPI2C0_SDA/LPSPI3_SCK/TPM0_CLKIN/LPTMR0_ALT3
ADC	PTE4	ARDUINO_A3/ADC0_SE21	PTE4	M11	PTE4/LPADC0_SE21/LPCMP1_IN1/SDHC0_D6/LPI2C0_SCL/LPSPI3_SOUT/CLKOUT/TPM1_CLKIN/RF0_DTM_RX
	PTE5		PTE5	R17	PTE5/LPCMP1_IN2/SDHC0_DCLK/LPI2C0_HREQ/LPSPI3_PCS2/LPCMP1_OUT/RF0_DTM_TX
	PTE6	BUTTON_LLWUP23	PTE6	P16	PTE6/LLWU_P23/LPADC0_SE22/SDHC0_D5/LPUART3_RX/LPSPI3_SIN/TPM1_CH0/LPTMR2_ALT1
	PTE7	BUTTON_LLWUP24	PTE7	N16	PTE7/LLWU_P24/LPADC0_SE23/SDHC0_CMD/LPUART3_TX/LPSPI3_PCS0/TPM1_CH1/FXIO0_D0
	PTE8	ARDUINO_A4/I2C_SDA	PTE8	M13	PTE8/LLWU_P25/SDHC0_D4/LPUART3_CTS/LPI2C3_SDA/TPM3_CH0/LPTMR2_ALT3
	PTE9	ARDUINO_A5/I2C_SCL	PTE9	M14	PTE9/LLWU_P26/SDHC0_D2/LPI2C3_SDAS/TPM3_CLKIN/FXIO0_D2
	PTE10	BUTTON_LLWUP25	PTE10	L12	PTE10/LLWU_P27/SDHC0_D3/LPI2C3_SCLS/TPM3_CH1/FXIO0_D3
	PTE11	BUTTON_LLWUP26	PTE11	M12	PTE11/SDHC0_D1/LPUART3_RTS/LPI2C3_SCL/TPM3_CH1/FXIO0_D1
	PTE12	ARDUINO_I2S_TX_BCLK	PTE12	L12	PTE12/LLWU_P28/SDHC0_D0/LPI2C3_SDAS/TPM3_CLKIN/FXIO0_D4
	PTE13	ARDUINO_I2S_TX_FS	PTE13	N17	PTE13/I2S0_TX_BCLK/LPI2C3_SCLS/TPM3_CH0/FXIO0_D5
	PTE14	ARDUINO_I2S_TXD	PTE14	L16	PTE14/I2S0_TX_FS/LPI2C3_HREQ/TPM3_CH1/FXIO0_D6
	PTE15	ARDUINO_I2S_RX_BCLK	PTE15	L17	PTE15/I2S0_TXD0/TPM3_CLKIN/FXIO0_D7
	PTE16	ARDUINO_I2S_RX_FS	PTE16	L14	PTE16/I2S0_RX_BCLK/TPM2_CH0/FXIO0_D8
I2S	PTE17	ARDUINO_I2S_RXD	PTE17	L15	PTE17/I2S0_RX_FS/TPM2_CH1/FXIO0_D9
	PTE18	ARDUINO_I2S_MCLK	PTE18	K13	PTE18/I2S0_RXD0/TPM2_CH2/FXIO0_D10
	PTE19	ARDUINO_AUDIO_SOF	PTE19	K16	PTE19/I2S0_MCLK/TPM2_CH3/FXIO0_D11
	PTE21	FXOS8700_INT2	PTE21	J17	PTE21/I2S0_TXD1/USB0_SOF_OUT/TPM2_CH4/FXIO0_D12
	PTE22	FXOS8700_RST	PTE22	J16	PTE22/I2S0_RXD1/LPI2C3_HREQ/TPM2_CH5/FXIO0_D13
	PTE27		PTE27	H14	PTE27/LPUART3_CTS/LPI2C3_SDAS/FXIO0_D28
				G14	PTE28/LPUART3_RTS/LPI2C3_SCLS/FXIO0_D29
SENSOR I2C	PTE29	FXOS8700_I2C_SDA	PTE29	G15	PTE29/LPUART3_RX/LPI2C3_SDA/FXIO0_D30
	PTE30	FXOS8700_I2C_SCL	PTE30	G17	PTE30/LPUART3_TX/LPI2C3_SCL/TPM2_CLKIN/FXIO0_D31

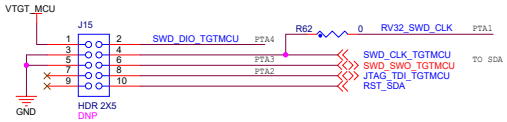
TAMPER1/RTC_CLKOUT	F13	TAMPER1/RTC_CLKOUT			
TAMPER0/RTC_WAKEUP	F14	TAMPER0/RTC_WAKEUP_b	TAMPER1	5	
TAMPER2	G12	TAMPER2	TAMPER0	5	
TAMPER3	H13		TAMPER2	5	
	A15	ANT			
	A16	GANT			
DAC0_OUT/LPADC0_SE16/LPCMP0_IN3/LPCMP1_IN3	T17				
	U2	LP	DCDC_LP	DAC0_OUT	
	T4	LN	DCDC_LN		
	D12	RESET	RST_SDA		RST_SDA 7
	C11	RF_CLKOUT	RF_CLKOUT	DNP	TP8
	T12	USB0_DM	USB_DN		USB0_DM 5
	T11	USB0_DP	USB_DP		USB0_DP 5
	E17	XTAL32	XTAL32		XTAL32 7
	E16	EXTAL32	EXTAL32		EXTAL32 7
	A11	XTAL_RF	XTAL_RF		XTAL_RF 7
	B11	EXTAL_RF	EXTAL_RF		EXTAL_RF 7

RV32M1

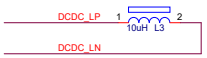
RISC-V JTAG CONNECTOR



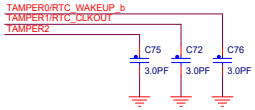
ARM SWD/JTAG CONNECTOR



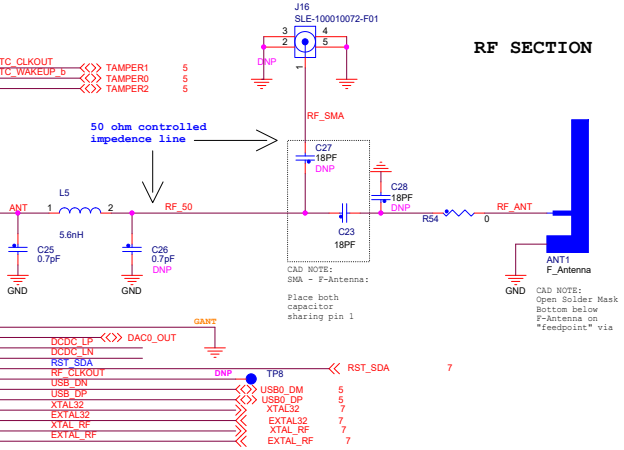
DCDC Inductor



CAD note: Place inductor close to MCU



RF SECTION



VEGA

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Page Title:	MCU_INTERFACE_1		
Size: C	Document Number: SCH-45731, PDF: SPF-45731		Rev: B
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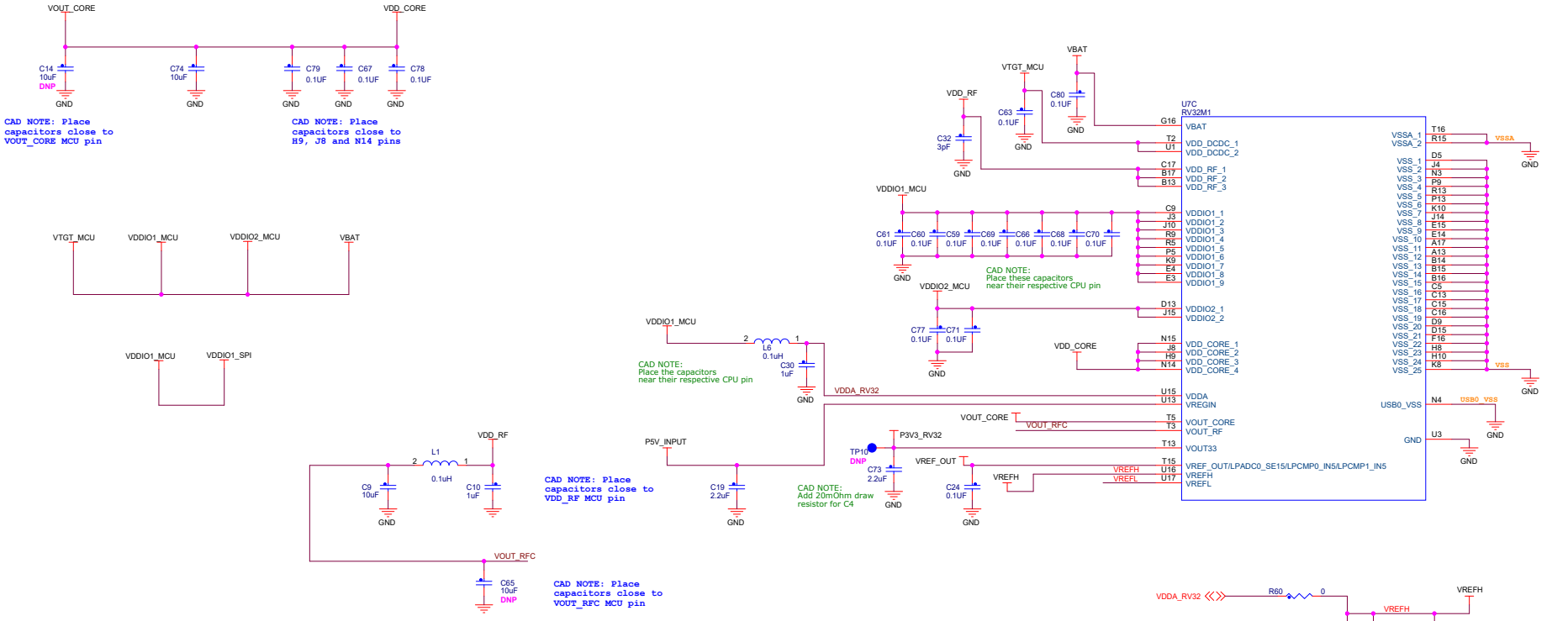

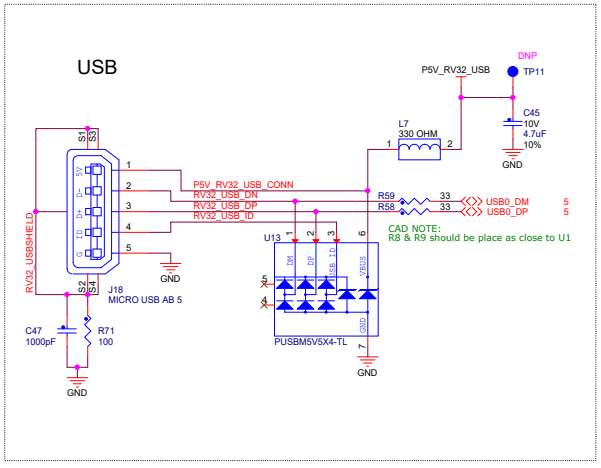

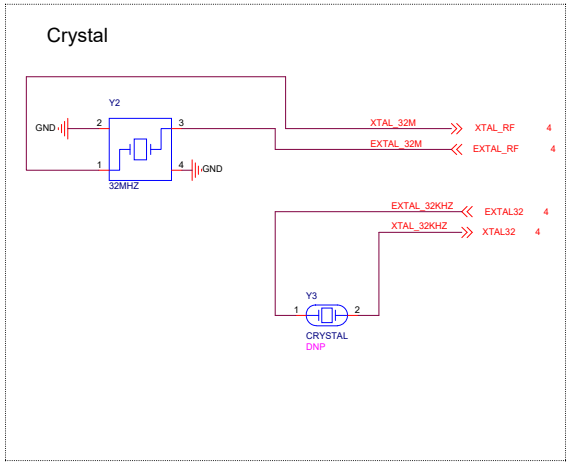

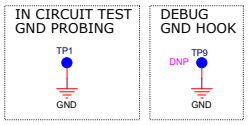

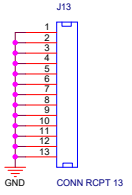

custom EMI SHIELD

ICAP Classification:	CP: ___	IUO:	PUBI: X_
Drawing Title:	RV32-VEGA-Lite		
Page Title:	MCU_INTERFACE_2		
Size: C	Document Number: SCH-45731, PDF: SPF-45731		Rev: B
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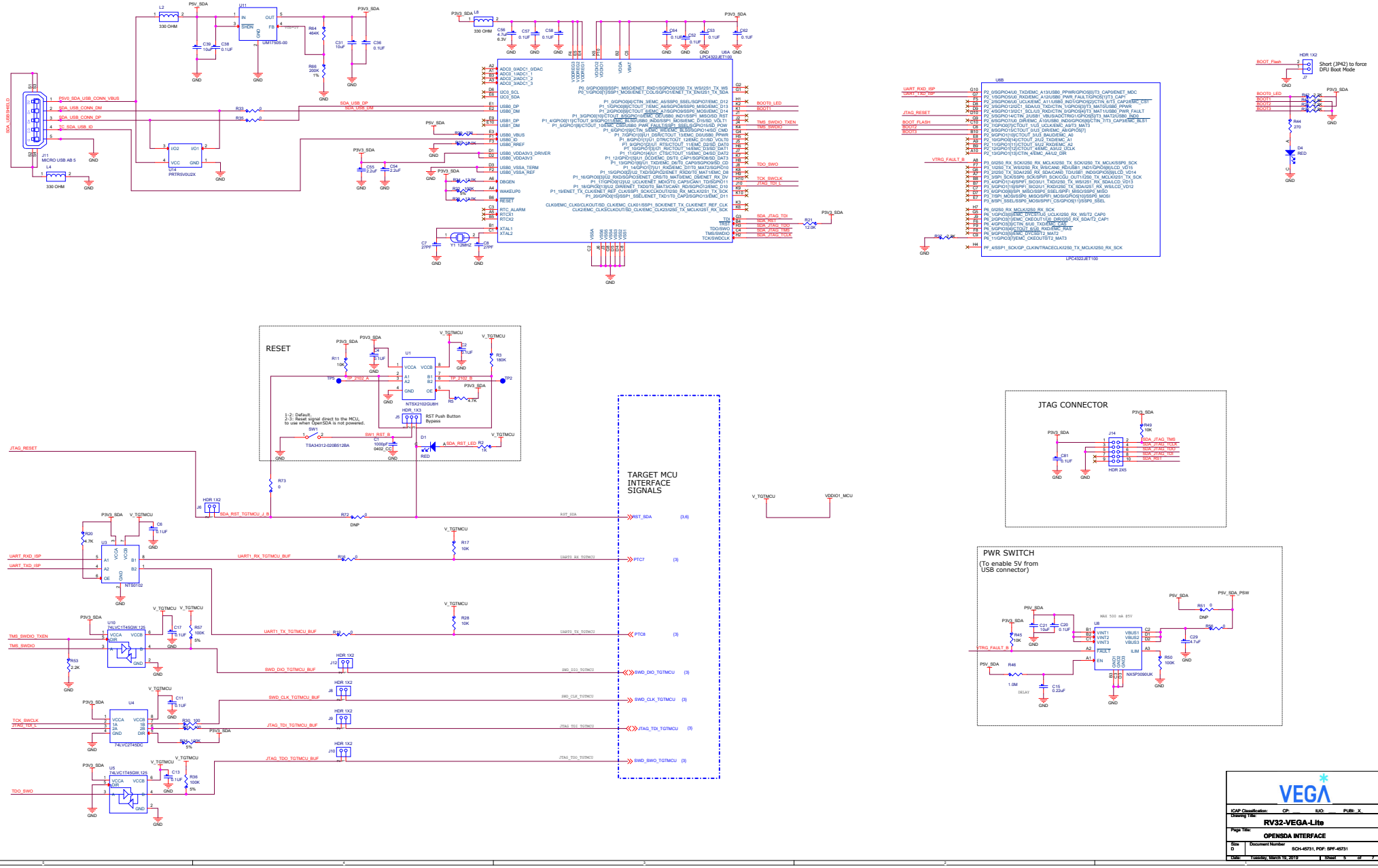
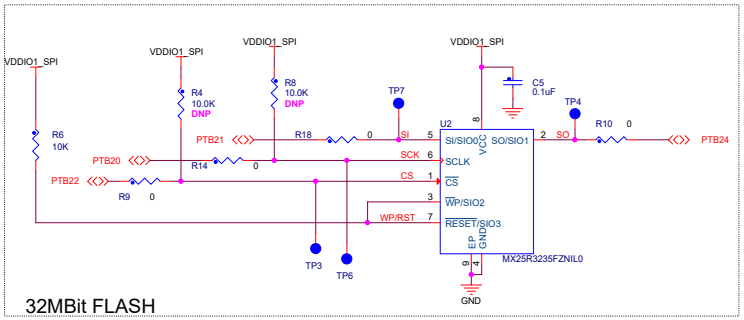
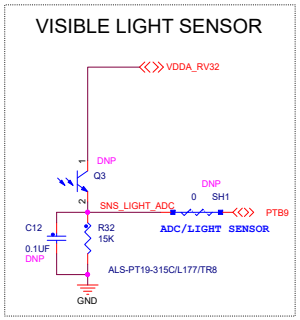
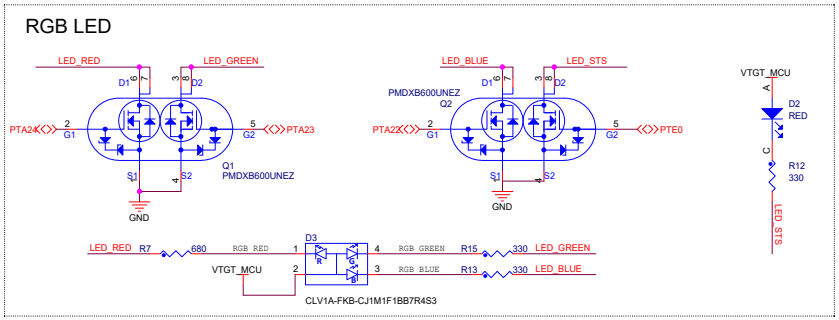
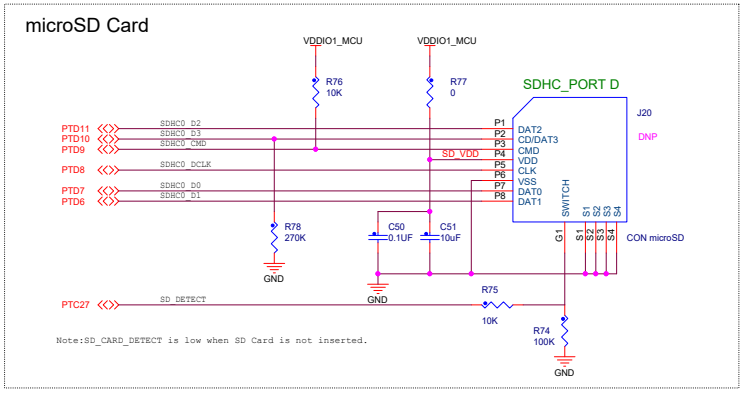
Freelink Interface

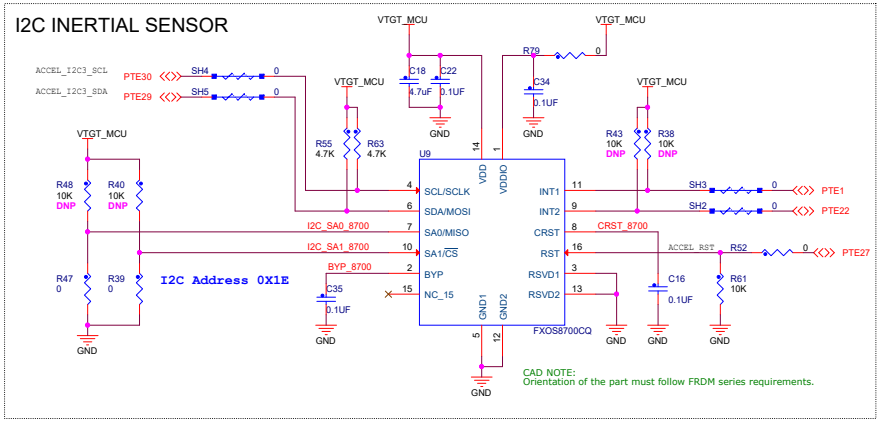


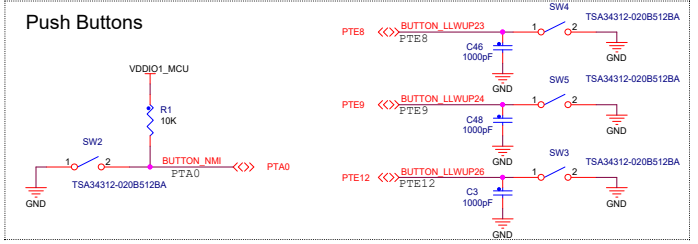

32MBit FLASH
VDDIO1_SPI
R4 10.0K DNP
R8 10.0K DNP
R6 10K
R18
R14
R9
TP7
TP4
TP3
TP6
C5 0.1uF
R10
PTB21
PTB20
PTB22
PTB24
SCK
CS
WP/SIO2
WP/RST
SI/SIO0
SO/SIO1
SCLK
RESET/SIO3
VCC
GND
EP GND
MX25R3235FZNIL0
U2

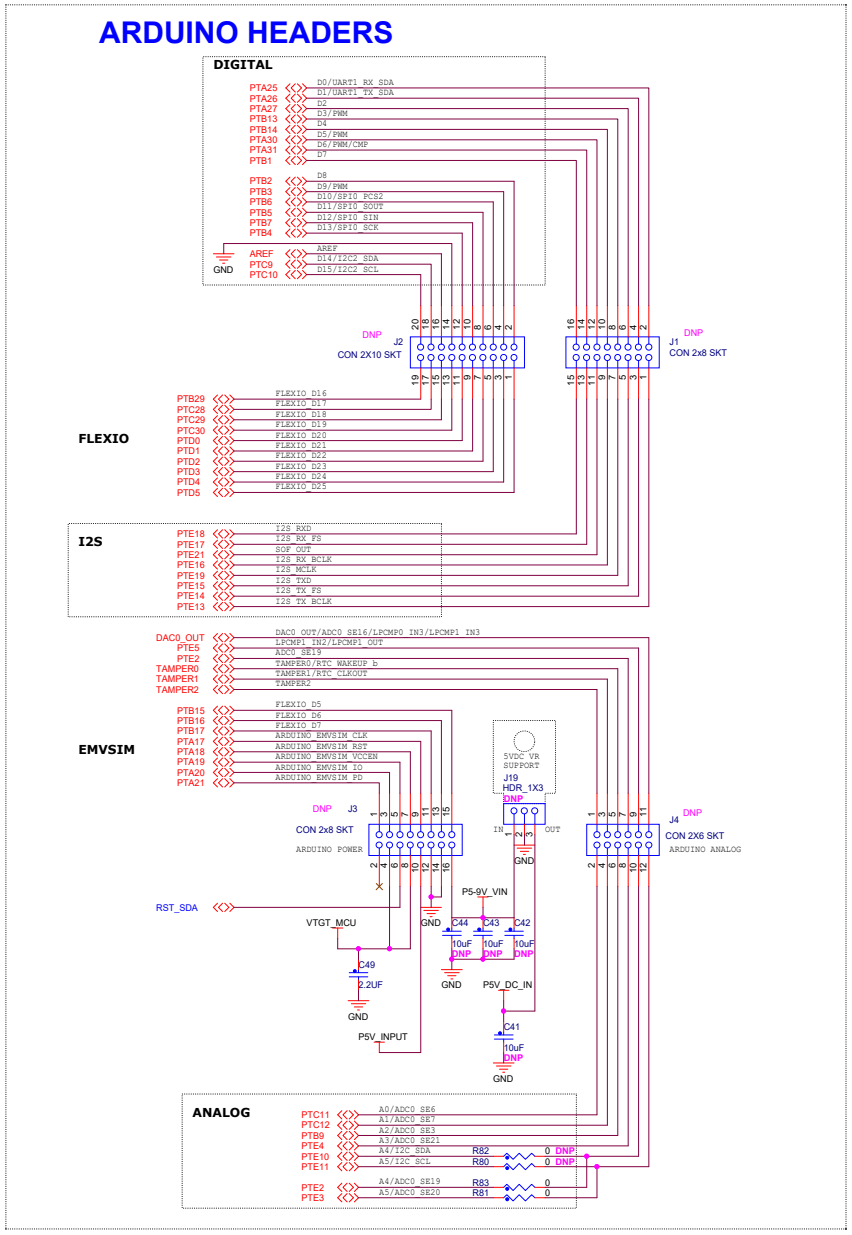

VISIBLE LIGHT SENSOR
VDDA_RV32
Q3
DNP
SNS_LIGHT_ADC
SH1
PTB9
ADC/LIGHT SENSOR
C12
0.1UF
R32
15K
ALS-PT19-315C/L177/TR8
GND

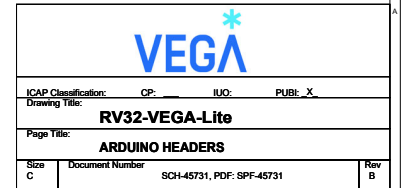

RGB LED
LED_RED
LED_GREEN
LED_BLUE
LED_STS
PMDXB600UNEZ
Q1
Q2
PTA24
PTA23
PTA22
PTE0
D1
D2
D3
R7 680
R15 330
R13 330
RGB RED
RGB GREEN
RGB BLUE
VTGT_MCU
CLV1A-FKB-CJ1M1F1BB7R4S3
R12 330
D2 RED


microSD Card
VDDIO1_MCU
R76 10K
R77 0
SDHC_PORT D
J20
DNP
PTD11
PTD10
PTD9
PTD8
PTD7
PTD6
SDHC0_D2
SDHC0_D3
SDHC0_CMD
SDHC0_DCLK
SDHC0_D0
SDHC0_D1
SD_VDD
DAT2
CD/DAT3
CMD
VDD
CLK
VSS
DAT0
DAT1
SWITCH
CON microSD
R78 270K
C50 0.1uF
C51 10uF
PTC27
SD_DETECT
R75 10K
R74 100K
Note:SD_CARD_DETECT is low when SD Card is not inserted.


I2C INERTIAL SENSOR
VTGT_MCU
ACCEL_I2C3_SCL
ACCEL_I2C3_SDA
PTE30
PTE29
SH4
SH5
C18 4.7uF
C22 0.1uF
R79
C34 0.1uF
R55 4.7K
R63 4.7K
R43 10K DNP
R38 10K DNP
R48 10K DNP
R40 10K DNP
R47 0
R39 0
U9
SCL/SCLK
SDA/MOSI
SA0/MISO
SA1/CS
BYP
NC_15
INT1
INT2
CRST
RST
RSVD1
RSVD2
VDD
VDDIO
GND1
GND2
FXOS8700CQ
I2C_SA0_8700
I2C_SA1_8700
BYP_8700
CRST_8700
ACCEL RST
SH3
SH2
PTE1
PTE22
R52 0
PTE27
R61 10K
C16 0.1UF
C35 0.1UF
I2C Address 0X1E
CAD NOTE:
Orientation of the part must follow FRDM series requirements.


Push Buttons
VDDIO1_MCU
R1 10K
SW2
BUTTON_NMI
PTA0
TSA34312-020B512BA
SW4
SW5
SW3
PTE8
PTE9
PTE12
BUTTON_LLWUP23
BUTTON_LLWUP24
BUTTON_LLWUP26
C46 1000pF
C48 1000pF
C3 1000pF
GND


ARDUINO HEADERS
DIGITAL
PTA25
PTA26
PTA27
PTB13
PTB14
PTA30
PTA31
PTB1
PTB2
PTB3
PTB6
PTB5
PTB7
PTB4
AREF
PTC9
PTC10
D0/UART1_RX_SDA
D1/UART1_TX_SDA
D2
D3/PWM
D4
D5/PWM
D6/PWM/CMP
D7
D8
D9/PWM
D10/SPI0_PCS2
D11/SPI0_SOUT
D12/SPI0_SIN
D13/SPI0_SCK
D14/I2C2_SDA
D15/I2C2_SCL
J2
CON 2X10 SKT
J1
CON 2x8 SKT
FLEXIO
PTB29
PTC28
PTC29
PTC30
PTD0
PTD1
PTD2
PTD3
PTD4
PTD5
I2S
PTE18
PTE17
PTE21
PTE16
PTE19
PTE15
PTE14
PTE13
EMVSIM
PTB15
PTB16
PTB17
PTA17
PTA18
PTA19
PTA20
PTA21
DAC0_OUT
PTE5
PTE2
TAMPER0
TAMPER1
TAMPER2
J3
CON 2x8 SKT
ARDUINO POWER
J4
CON 2X6 SKT
ARDUINO ANALOG
J19
HDR_1X3
5VDC_VR SUPPORT
RST_SDA
P5-9V_VIN
P5V_DC_IN
P5V_INPUT
C49 2.2UF
C44
C43
C42
C41
ANALOG
PTC11
PTC12
PTB9
PTE4
PTE10
PTE11
PTE2
PTE3
R82
R80
R83
R81


VEGA
ICAP Classification:
CP:
IUO:
PUBI: X
Drawing Title:
RV32-VEGA-Lite
Page Title:
ARDUINO HEADERS
Size C
Document Number
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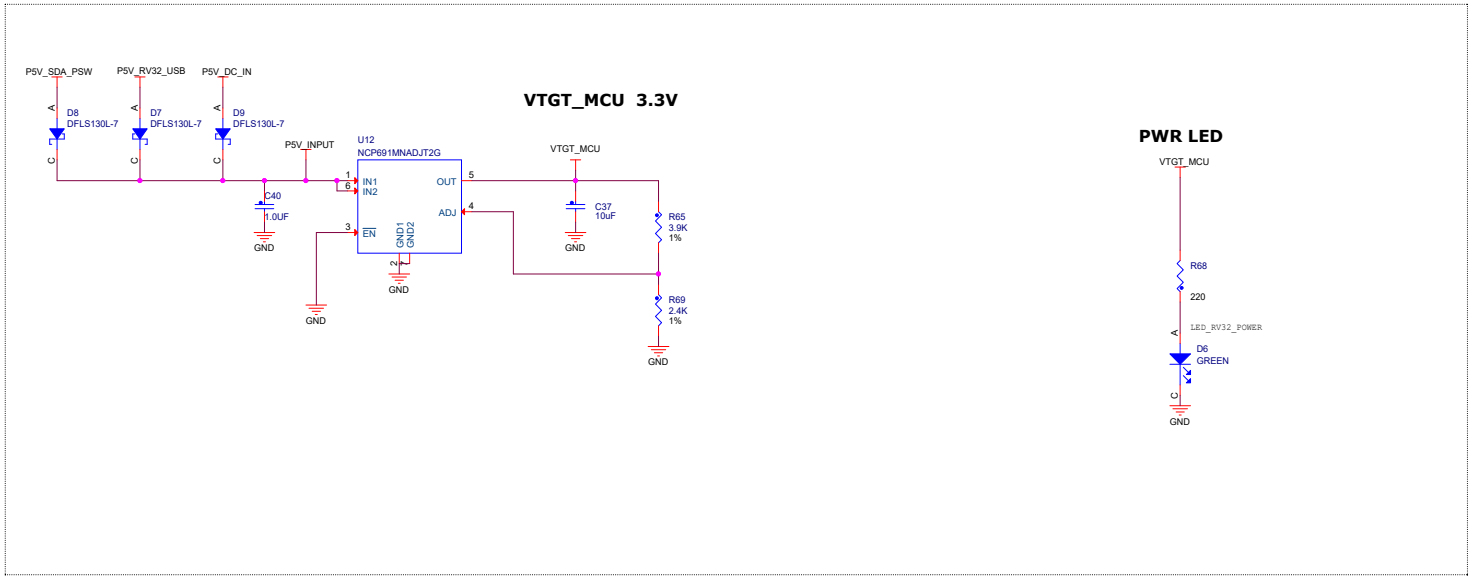

ICAP Classification:	CP: ___	IUO:	PUBI: _X_
Drawing Title:	RV32-VEGA-Lite		
Page Title:	POWER MANAGEMENT		
Size: C	Document Number: SCH-45731, PDF: SPF-45731		Rev: B
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